

WHAT IS CLAIMED IS:

1. An electronic medical prescription handling system comprising:

an interface for receiving or retrieving blocks of data from different applications programs including electronic prescription generating software, said blocks of data being encoded in accordance with respective formatting conventions;

a code translator operatively tied to said interface for converting each incoming data block from a respective formatting convention to a predetermined common formatting convention;

a prescription analyzer operatively connected to said code translator for checking an incoming medical prescription for potential drug interaction; and

an alert signal generator operatively coupled to said prescription analyzer for generating an alert signal upon detection of a drug interaction possibly resulting in a person by filling and use of the medical prescription.

2. The system defined in claim 1 wherein said code translator is a first code translator, further comprising a second code translator operatively connected to said first code translator for converting data blocks from said common formatting convention to another formatting convention for use by one of said applications programs.

3. The system defined in claim 2, further comprising a data transmitter operatively coupled to said second code translator for transmitting converted data blocks therefrom to a remote computer containing said one of said applications programs.

4. The system defined in claim 3, further comprising a batch and sequence generator operatively connected at an input side to said second code translator and at an output side to said data transmitter.

5. The system defined in claim 2 wherein said second code translator is operatively connected to said prescription analyzer for incorporating prescription analysis into transmissions to said one of said applications programs.

6. The system defined in claim 2 wherein said second code translator is operatively connected to said prescription analyzer for incorporating said alert signal into a transmission to said one of said applications programs.

7. The system defined in claim 1 wherein said code translator includes a code identification or recognition unit operatively linked to said interface for determining, for each incoming data block, the formatting convention of the incoming data block.

8. The system defined in claim 1 wherein said code translator includes:  
a data field detector for identifying types of data elements in the incoming data blocks; and

a definition attach module operatively connected to said data field detector for associating data definitions with respective data elements.

9. The system defined in claim 1 wherein said interface is connected to a computer network, said code translator and said prescription analyzer being located on a first computer connected to said network, at least one of said applications programs being located on a different second computer connected to said network.

10. The system defined in claim 1 wherein said applications programs are taken from the group consisting of accounting programs, patient record keeping programs, medical record keeping programs, insurer programs, prescription generating programs, prescription fulfillment programs, claims processing programs, drug formulary programs, and drug interaction systems.

11. The system defined in claim 1 wherein said prescription analyzer includes means for accessing a record keeping database.

12. The system defined in claim 1 wherein said prescription analyzer includes means for accessing a prescription interaction database.

13. The system defined in claim 1, further comprising an integrity check module operatively linked to said interface and said code translator for verifying integrity of incoming data blocks.

14. A data handling and transfer system comprising:

an interface for receiving or retrieving blocks of data from different applications programs including electronic prescription generating software, said blocks of data being encoded in accordance with respective formatting conventions;

a first code translator operatively tied to said interface for converting each incoming data block from the respective formatting convention to a predetermined common formatting convention, said first code translator including (a) a data field detector for identifying types of data elements in the incoming data blocks and (b) a definition attach module operatively connected to said data field detector for associating data definitions with respective data elements; and

a second code translator operatively connected to said first code translator for converting each data block from said common formatting convention into a target software formatting convention for use by one of said applications programs.

15. The system defined in claim 14 wherein said interface is connected to a computer network, said first code translator being located on a first computer connected to said network, said one of said applications programs being located on a second computer connected to said network.

16. The system defined in claim 15 wherein said second code translator is located on said first computer.

17. The system defined in claim 15 wherein said second code translator is

located on said second computer.

18. The system defined in claim 14, further comprising a data transmitter operatively coupled to said second code translator for transmitting converted data blocks therefrom to a remote computer containing said one of said applications programs.

19. The system defined in claim 18, further comprising a batch and sequence generator operatively connected at an input side to said second code translator and at an output side to said data transmitter.

20. The system defined in claim 14, further comprising data processing module connected between said first code translator and said second code translator for operating on data blocks in said common formatting convention.

21. The system defined in claim 20 wherein said data processing module includes a prescription analyzer operatively connected to said first code translator and to at least one medical database for checking an incoming medical prescription for potential drug interaction.

22. The system defined in claim 14 wherein said first code translator includes a code identification or recognition unit operatively linked to said interface for determining,

for each incoming data block, the software formatting convention of the incoming data block.

23. The system defined in claim 14, further comprising an integrity check module operatively linked to said interface and said first code translator for verifying integrity of incoming data blocks.

24. The system defined in claim 14 wherein said applications programs are taken from the group consisting of accounting programs, patient record keeping programs, medical record keeping programs, insurer programs, prescription generating programs, prescription fulfillment programs, claims processing programs, drug formulary programs, and drug interaction systems.

25. A medical risk control method comprising:

receiving electronic prescriptions encoded in accordance with a variety of different software formatting conventions;

automatically converting the received electronic prescriptions from the respective formats into a common formatting convention;

operating a computer to automatically analyze the converted electronic prescriptions to detect possible dangers to respective patients for whom the electronic prescriptions are generated; and

transmitting the analyzed electronic prescriptions to respective target applications

programs.

26. The method defined in claim 25, further comprising automatically converting the analyzed electronic prescriptions and results of the prescription analysis into preselected software formats utilizable by the respective target applications programs.

27. The method defined in claim 26 wherein the converting of the analyzed electronic prescriptions and the results of the prescription analysis is performed prior to the transmitting of analyzed electronic prescriptions to the respective target applications programs.

28. The method defined in claim 26 wherein the converting of the analyzed electronic prescriptions and the results of the prescription analysis is performed after the transmitting of analyzed electronic prescriptions to the respective target applications programs, the converting of the analyzed electronic prescriptions and the results of the prescription analysis being performed at a location remote from said computer.

29. The method defined in claim 25 wherein the electronic prescriptions are received over a computer network from remote computers, the target applications programs being located on remote computers, the transmitting of the analyzed electronic prescriptions including transmitting the analyzed electronic prescriptions over

said computer network.

30. The method defined in claim 25 wherein the automatic converting of the received electronic prescriptions from the respective formats into a common formatting convention includes identifying types of data elements in the received electronic prescriptions and attaching data definitions to respective data elements.

31. The method defined in claim 25 wherein the electronic prescriptions are generated for respective patients and wherein the operating of said computer to automatically analyze the received electronic prescriptions includes:

accessing a medical records database to determine drugs currently being taken by the respective patients;

automatically accessing a drug interaction database; and

automatically determining whether fulfillment and utilization of any one of the electronic prescriptions by a respective one of the patients is contraindicated by a possible deleterious drug interaction.

32. The method defined in claim 25 wherein the automatic converting of the received electronic prescriptions from the respective formats into a common formatting convention includes automatically determining, for each incoming data block, the formatting convention of the incoming data block.



33. The method defined in claim 25 wherein said applications programs are taken from the group consisting of accounting programs, patient record keeping programs, medical record keeping programs, insurer programs, prescription generating programs, prescription fulfillment programs, claims processing programs, drug formulary programs, and drug interaction systems.

34. The method defined in claim 25, further comprising automatically verifying integrity of incoming data blocks.

35. A data handling and transfer method comprising:  
receiving incoming data blocks from different applications programs including electronic prescription generating software, said incoming data blocks being encoded in accordance with respective formatting conventions;

automatically converting each incoming data block from the respective formatting convention to a predetermined common formatting convention, the converting of each data block including (a) identifying types of data elements in the respective data block and (b) attaching data definitions to respective data elements; and

automatically transforming each converted data block from said common formatting convention into a target software formatting convention for use by at least one of said applications programs.

36. The method defined in claim 35 wherein the converting and the transforming

of the data blocks occur on the same computer.

37. The method defined in claim 36, further comprising transmitting transformed data blocks to a remote computer containing said one of said applications programs.

38. The method defined in claim 35 wherein the converting and the transforming of the data blocks occur on different computers connected to one another via a network, further comprising transmitting the converted data blocks from a first one of the different computers to a second one of the different computers prior to the transforming of the converted data blocks.

39. The method defined in claim 35 wherein said incoming data blocks are received over a computer network from remote computers, the converting and transforming of data blocks being performed on one computer, said one of said applications programs being located on a different computer connected to said network.

40. The method defined in claim 35, further comprising transmitting transformed data blocks to a remote computer containing said one of said applications programs.

41. The method defined in claim 35, further comprising operating on converted data blocks in said common formatting convention prior to transforming of the data blocks.

42. The method defined in claim 38 wherein said data blocks include electronic medical prescriptions and wherein the operating on converted data blocks includes accessing at least one medical database and checking an incoming medical prescription for potential drug interaction.

43. The method defined in claim 35 wherein said applications programs are taken from the group consisting of accounting programs, patient record keeping programs, medical record keeping programs, insurer programs, prescription generating programs, prescription fulfillment programs, claims processing programs, drug formulary programs, and drug interaction systems.